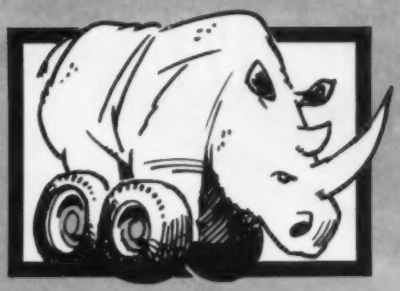
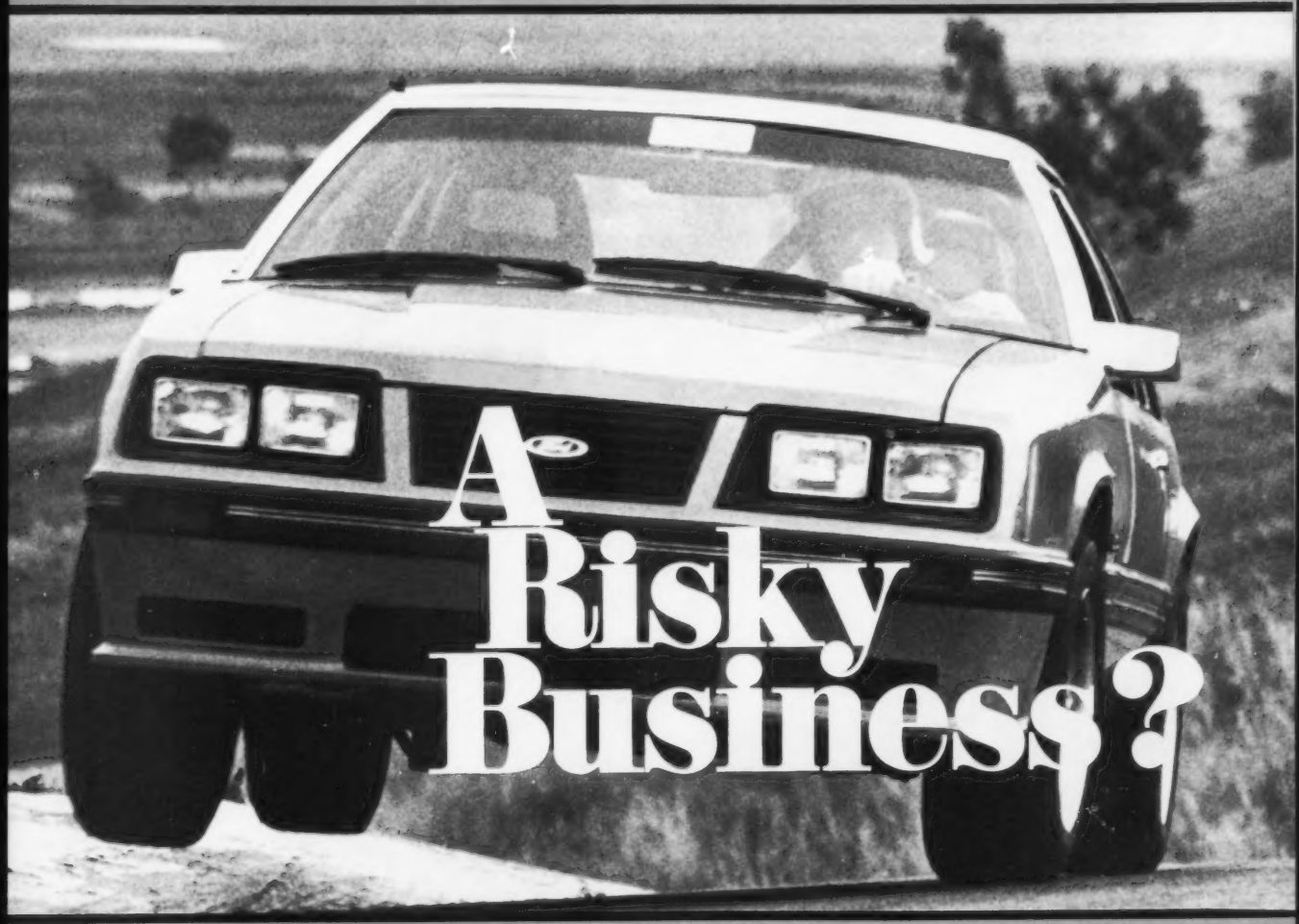
FEBRUARY 1985

DRIVER



AVOIDING THE HORNS OF A DILEMMA



A Risky Business?

SAFETY and the BACKYARD MECHANIC

DRiVER

A Risky Business?

"In this pizniss is much risico"

***Ian Fleming,* For Your Eyes Only**

"It is only by risking our persons from one hour to another that we live at all." — William James

"Great deeds are usually wrought at great risks." — Herodotus

These are the slogans of adventure and achievement. They are another way to say "No guts, no glory." If you read any of the popular psychology books, you will find statements like those. The psychologists tell you taking risks is a good thing; it adds to personal growth; it makes life more exciting. And these ideas are true. For example, for personal growth, running a longer distance may help you get additional benefits from the exercise. To add excitement to your life, taking up a new sport such as ice skating might do the trick.

But we need to be careful how generally we apply any advice. Remove risk-taking from its proper context and you create an entirely different meaning. Whereas it might be a good thing to try to run farther on your morning jog, it's a bad idea to try that longer run across a shooting range. Likewise, taking up ice skating might be a good idea, but not at a local lake in July.

RISKY DRIVING?

If we were to apply the two quotes that began this article to the activity of driving, we might get the idea that risky or reckless driving is an admirable thing. However, that's taking it out of context. Driving at 90+ mph might be the thing to do on a race track, but not on a highway.

Despite this, certain drivers try to apply some of these ideas to their driving behavior. They take risks that not only are unwise but also dangerous. Speeding, tailgating, fast turns or lane changes through small gaps in traffic — these and many others are risky driving behavior.

The scientists who study driving and driver behavior have examined the subject of risk-taking and have discovered some facts about who the risk-takers are and some theories about why they take risks. We want to examine both the traits of these people and their possible reasons for doing what they do. First, we'll look at the "biographical" information.

RISKY PEOPLE?

One study of drinking and driving offenders who had taken an alcohol educational program (Donovan and Marlatt, 1982) separated these people into five different groups on the subject of drinking behavior and driving risk.

Of these, two groups showed the greatest levels of risk-enhancing traits. One could be called the "depressed" group, who showed the "highest levels of depression and resentment as well as the lowest levels of assertiveness and emotional adjustment. They also perceived themselves as having the least personal control over the outcome of their lives and assumed the least personal responsibility toward accident involvement."

The second group could be called the "hostile" types, those with "the highest level of driving-related aggression and competitive speed as well as the lowest level of caution while driving when upset. They also had the highest levels of sensation seeking, assaultiveness, indirect and verbal hostility, and irritability. In addition, these individuals had moderate levels of depression, emotional instability, and external perception of control."

A third group also had high levels of risk-enhancing traits, although not so high as the two previous groups. The people in this "tense" group "were particularly noteworthy for their high levels of driving for tension reduction, low levels of general and driving related externality (feelings of lack of control over events), and relatively low levels of depression and resentment."

Of course, these are the traits of some DWI offenders, but the same traits could be applied to the general population, and they would probably indicate fairly high risk-taking tendencies in anyone. Irresponsibility, hostility and tension do not contribute to safe driving.

RISKY BEHAVIOR?

Other research has stressed aspects of driving behavior as evidence of risk-taking tendencies in the drivers. One study (Evans and Wasielewski, 1982), involving close following distance or "headways" as an indicator of risk-taking, concluded that "accident-involved drivers and drivers cited for violations exhibit

continued

(left)
"Now, if I can find the ignition . . ."
Taking undue risks while driving is like trying to copy a circus escape artist: Something could go seriously wrong. But driving is not a game; it is a serious business, and a risky one at that. Don't make it more risky by taking foolish chances.

DRIVER

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higher levels of risk in everyday driving than accident-free and citation-free drivers." The researchers also said the association between risk and violations was stronger than that for risk and accident history because violations were "more likely to result from driving patterns directly related to risk" than were the accidents.

Another piece of research (Evans and Wasielewski, 1983), also involving "headways," gave some general traits of those who showed a tendency toward higher risk driving. These individuals were usually younger, male drivers with a driving record that included previous accidents and traffic violations. They tended to drive newer cars of intermediate weight. They also tended not to wear seat belts.

Still another study (Wasielewski, 1984), this time using driving speeds as the evidence of risk-taking mentality, supported most of the conclusions from the "headway" study about those who take more risks when driving: They tend to be younger. They tend to drive alone. They tend to have a record of accidents and traffic violations, especially violations. They tend to drive newer cars of intermediate weight.

THE PORTRAIT

So, what is the picture we're getting of the risk-taking driver? He is more likely male than female, to begin with. He is younger and he doesn't wear safety belts. He drives a newer, medium sized car. He drives alone rather than accompanied. He has some traffic violations and some accidents, as opposed to none at all. He has certain psychological traits — hostility, depression, tension, etc. — that affect his driving performance and lead to risky driving.

It may or may not be accurate to present this kind of portrait. Much research has been done on the subject of risk-taking, and more will be accomplished. However, the results of the already-completed work lends support to the picture. (One interesting study, Ferguson, et al., 1984, concluded, "In general, the results indicated that the same individual characteristics that predict poor military performance also predict risk of accidental injury.")

Of course, all this information doesn't exclude the other drivers from the risk-taking group. All of us have seen older drivers and female drivers operating their cars in a dangerous way. All of us have seen several people in one car that seemed headed for an accident. All of us have seen small cars driven in a reckless fashion. And all of us probably know individuals who are risky drivers who don't seem to fit into one of the psychological groups listed above. However, this only shows that anyone can be a risk-taker.

"Speak softly and carry a big stick." It is risky to go out without the proper equipment for the job to be done, whether that job is elephant hunting or driving in traffic. The proper equipment for driving is, of course, the safety belt and shoulder harness.

RISKY REASONS?

Drivers and how they behave have always been the unknown factor in traffic accidents. Automobiles and roads are concrete items (no pun intended) and they provide many facts and figures to study, giving the scientists a basis for their conclusions. Compared to these things, studying drivers is a much less precise undertaking. There are not easy ways to judge what effect the behavior of the driver will have on safety.

For our purposes, the reason people take risks is perhaps a more important consideration. Why do people take risks when they drive? Obviously, since people are individuals, they have different reasons for what they do, and this is where the theories come in.

Some researchers suggest that people weigh the risks against the benefits to be gained by whatever action they take. The idea is that drivers will assume a risk if they can see a purpose to it, if they can see it as productive in some way. For instance, some may see speeding as risky but beneficial in terms of reaching a destination sooner.

This idea of benefits does not apply in all cases, of course. One might be hard pressed to find a benefit of following too closely, for example, but some researchers have a theory to explain even this.

RISKY INTENSITY?

This theory is that of "driving intensity" (Evans, et al., 1982). This is the theory that drivers desire a certain level

continued

"Are you sure about this?" Taking risks may be the exciting way to live, and it may make a great magic trick, but on the streets and highways you have no right to endanger the welfare of others. Remember when you drive that your actions affect many other people, not just yourself.

of "intensity" and will adjust the amount of risk they take in each driving circumstance to maintain that tension or intensity.

They explain it this way:

"Although maintaining a short headway in high-flow freeway traffic would seem to have a negligible effect on travel time and also tends to substantially increase risk if a sudden stop is required, it is often the only way a driver can attempt to increase driving intensity under such conditions. For example, a short headway may induce the lead driver to go faster if conditions permit, and it also prevents other cars from cutting ahead in the traffic stream." (Evans, et al., 1982)

Some of the safety researchers have developed an idea called the "danger compensation theory," which states that the effect of any improvement in safety, whether it be seat belts or road improvements, could be offset by an increase in the risk taking of drivers. They believe this increased risk taking could decrease the benefit of the improvements, or leave a net zero change in number of accidents, or even have a negative effect (accidents would increase). In other words, the driver might feel safer with his belts or his improved roads and take more chances — accidents would not decrease, and might even increase.

RISK COMPENSATION?

One researcher puts it this way: "It is generally assumed that any safety improvement in cars or roads decreases the accident rate. This ignores the response of the driver when he becomes aware of the change. If the driver installs and uses seat belts, for example, he may feel free to behave less carefully in other aspects of his driving. Similarly, reducing the number of drunken drivers on the road may induce others to drive less defensively. Given that the driver does change his style in reaction to an improvement in the car or road, will he change to a degree that accidents occur at less than, equal to or more than their previous rate? Until this question is answered, any environmental safety improvement would seem to be no more than an act of faith and may in fact be increasing road accidents." (O'Neill, 1977)

The idea of "driving intensity" also relates to the danger compensation theory: Because drivers desire a certain level of intensity, they seek to regain that level when a safety improvement makes driving safer (or decreases the driving intensity level).

Danger compensation theory is controversial, but it has received some support from a few studies that show an initial decrease in accidents after a safety improvement, followed by a rise back toward former levels. Of course, it has not been proven that these variations are due to driver compensation for the improvements.

However, it points up an interesting idea: This offsetting of safety improvements by increased driver risk taking is certainly possible. It is, therefore, the driver's *perception* of the risk that could be the determining factor in safety. If the driver sees a risk, he will drive more carefully. If he doesn't, he won't.

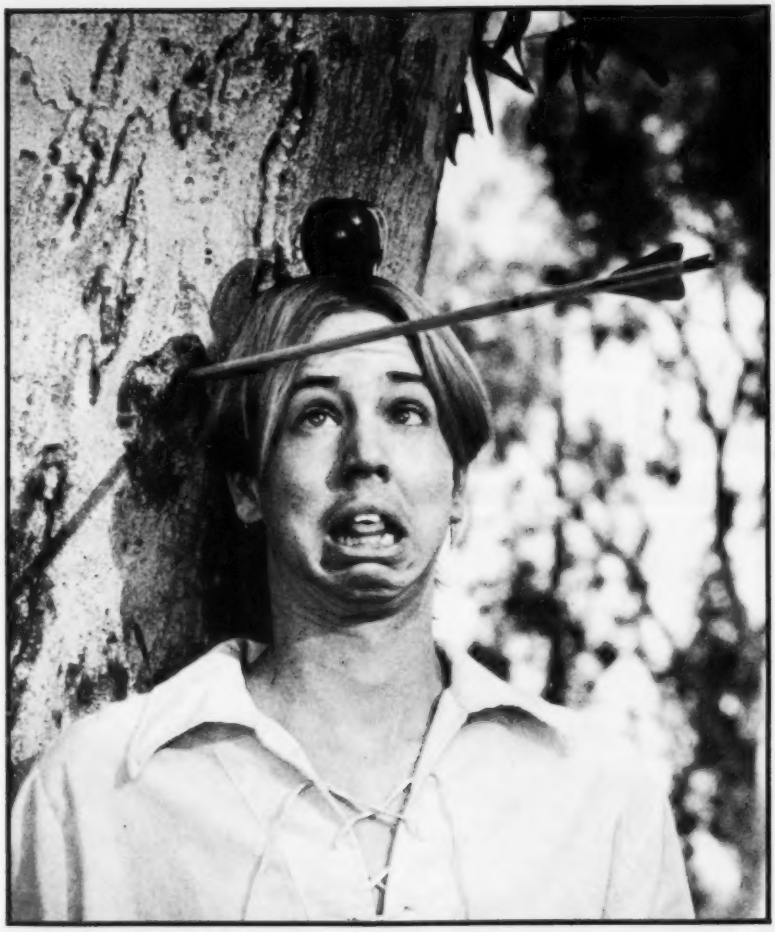
RISKY ATTITUDES?

Another problem in controlling the risk-taking of drivers is their attitude toward any safety improvements. Sometimes, as in the case of seat belt laws, the driver's attitude will determine whether he benefits from the effort at greater safety.

A study of countries with mandatory belt laws revealed the following:

"The measured impact of mandatory seat belt usage regulations on automobile safety and accident severity appears to be substantially less than anticipated. A review of accident data collected by a number of countries, before and after implementation of a mandatory use law, indicates that mandatory seat belt usage made a measurable impact on safety only after the passenger belt usage rate rose above 60 percent. Data from these countries also indicate that user compliance above 60 percent is attainable only with rigorous usage enforcement programs.

"The explanation appears to be related to the fact that drivers are not a homogenous population. Drivers who generally exhibit more risk-taking behavior and who have the most automobile accidents, are the least likely to comply voluntarily with the seat belt law, and are the last



"I shot an arrow . . ." William Tell and his son knew the difference between a safe action and a risky, foolhardy one, but not everyone can work with such a small margin for error. Make sure you allow sufficient space for following distance or lane changes or any other driving action you may take.

drivers to be affected by enforcement programs. . . .

"For the purpose of restraint effectiveness analysis the driving public can apparently be divided into three groups. The first group is composed of safety-conscious individuals who obey the driving laws, routinely wear seat belts, and are involved in few automobile accidents. The second subset of the driving population are generally law abiding individuals who wear seat belts because use is mandatory, but would not necessarily wear them otherwise. The last group contains "risk takers." The drivers with the more aggressive risk-taking behavior and the higher likelihood of having an accident, are less likely to comply with the seat belt law, and are last to be affected by an enforcement program. Even when compliance rates double or triple above the typical 12-20% "voluntary" user rate, the belt users appear to be drawn from the population of "safe" drivers who have far fewer accidents than the non-belt users. Unless a high compliance rate can be anticipated, mandatory belt usage or mere belt installation cannot be expected to significantly or even measurably impact safety." (McCarthy, et al., 1984)

RISKY PERCEPTIONS?

So the difficulty is not having the seat belts available or mandating their use. It is, as always, getting the public to use them, and getting large numbers to use them.

This is the problem in any endeavor designed to increase safety: The driver's perceptions of the risk involved in any driving situation will determine how safely he will operate his car. As we said above, if the driver sees an action as too risky, he will drive more safely. If he doesn't, he won't. This is the challenge for the safety professional — to get drivers to understand the hazards so they will react accordingly.

However, the responsibility does not all rest with the safety professional. Each driver has the responsibility to recognize risks and to avoid them, both for his own sake and for the sake of the others on the road that his actions might affect.

To put it another way, we'll quote another source:

"Take calculated risks. That is quite different from being rash." — George S. Patton

To some degree, the calculated risk is just the simple act of driving and being out among the other risk takers. Being "rash" is doing anything that might endanger yourself or another on the road.

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ARRIVE ALIVE

I buckled up and lived!

Congratulations! You buckled up and lived! By using your occupant restraint systems you are here to tell about it.

Now, if you will tell us about the crash you survived we will send you a T-shirt just like you see here.

In a letter coordinated through your local safety office tell us:

- The date of the accident (it must have occurred in 1985);
- The type of restraint system used (safety belt [lap or lap/shoulder], infant/child safety seat, automatic safety belt, automatic air cushion [airbag]);
- The number of people, excluding yourself, in your vehicle at the time of the accident;
- The ages of the survivors, including yourself, in your vehicle;
- The year, make and model vehicle; and,
- Give us a brief description of the accident.

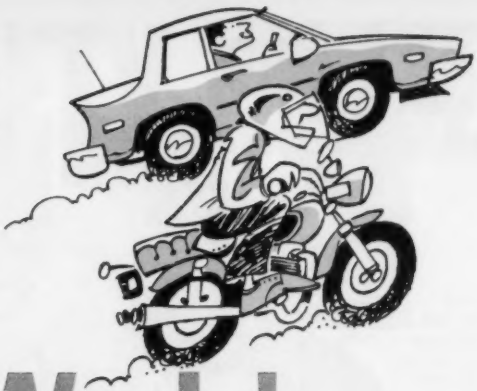
Remember, your letter must have your local safety office's comments on it.

Be sure to include your name and current address as well as what size T-shirt you want (medium, large or x-large).

Your letter should be sent to:

HQ. AFISC/SEGT
"Arrive Alive In 85"
Norton AFB CA 92409-7001

IN '85!



Helmets Work!

You were wearing your helmet and you had a motorcycle mishap which involved your head and a disagreeable object. Guess what? By using your helmet you are still here to tell about your accident.

Now tell us about it and we will send you a T-shirt just like you see here.

In a letter coordinated through your local safety office tell us:

- The date of the accident (it must have occurred in 1985);
- The type of helmet used (full coverage, ¾-coverage, ½-coverage);
- The type of certification the helmet had (DOT, SNELL, ANSI 290-1-197, FMVSS 218)
- The ages of all the survivors; and,
- Give us a brief description of the accident.

Remember, your letter must have your local safety office's comments on it.

Be sure to include your name and current address as well as what size T-shirt you want (medium, large or x-large).

Your letter should be sent to:

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Norton AFB CA 92409-7001

True Story

make it Click

National Safety Council

by TOM WALRAVEN
1849 Electronics Installation Squadron
McClellan Air Force Base, California

Do seat belts and child restraints work? You betcha!! I was heading home on Monday, 29 October, at about 1645, in the usual bumper-to-bumper traffic. I had just come over the railroad overpass on Airbase Drive, and was approaching the signal at Madison. It turned red, just like it always does when you're the fourth vehicle in line, so I stopped along with everyone else. It changed to green almost immediately, triggered by the magnetic sensors embedded in the pavement. Before proceeding into Madison, I glanced to my left and saw an early model Dodge (a big 'un) bearing down on me at an extremely high rate of speed, oblivious to the traffic in front of him or the red light facing him. I braked hard and braced myself for the impact that I was sure would come, but as the front of my van dipped, the big Dodge slid by within inches.

Out of the corner of my right eye I caught a glimpse of a yellow object, and I watched helplessly, as if in slow motion, as the big Dodge, screeching, sliding, smashed into the side of that yellow object. It was a Plymouth Horizon with a USAF captain driving, his wife beside him and his infant daughter in the back, strapped into a child's restraining seat. The force of the impact spun the Horizon around in the middle of the intersection, caved in the rear quarter-panel, sheared off the driver's door handle, and bent the rear wheel in 45 degrees. The big Dodge continued sliding, with broken glass, grill pieces, and parts of the Horizon spewing out behind it for another hundred feet, before coming to rest against the curb.

I turned on my warning lights, unsnapped my seat belt, and jumped out of the van, and my wife did the same. In an instant, we were both sprinting toward the little Horizon, to the back door where we had last seen the infant sitting. As I pulled open the rear door on the pasenger side, the child's mother was reaching over the back seat for the terrified infant. With great relief, I discovered that the child was still strapped into her infant seat, in an upright position. A quick check revealed that she had no visible cuts or contusions. I asked the mother if she wanted to go to the McClellan Clinic for a closer checkup, and at first she refused. Suspecting she was not in a rational state of mind, I directed her to go with my wife to the center traffic island. I then turned my attention to the driver, who was understandably a little shook up — but unhurt. Unbuckling his seat belt, he told his wife and child that he was okay. The mother then calmed down somewhat and agreed to go with my wife to the clinc. A passing motorist notified the CHP, while I, another motorist, and the driver of the big Dodge directed traffic around the accident area.

The driver of the Dodge said that he did not see the light turn red and that he had made no attempt to stop until he saw my van in the intersection. Further, he said he did not see the Horizon until he hit it. The police arrived shortly and cleared the intersection. A passing medical technician recognized the captain's car and stopped, offering to drive me and the captain to the clinic. We met my wife at the Main Gate, where she advised the captain that his wife and daughter were both fine and waiting for him at the clinic. He thanked me for my help and proceeded to the Clinic, while my wife and I went on home.

They mailed us a thank you note a few days later adding that they were all okay and fully realized that being buckled up had averted a real tragedy. Reflecting on the accident, I also am thankful that everyone was buckled up and that the Good Lord was watching over us — this time. They *do work*.

BRINGING SAFETY HOME

by JO1 REX C. KRAMER
Official U.S. Navy Photos (Courtesy USS Chandler)

Giving the "Thumbs Up" for safety in motorcycle operation, some of the 28 crewmen from USS Chandler and USS Callaghan who completed the special one-week course indicate their support of motorcycle safety.

Motorcycle Safety Instructor Jack Lucarelli (left center) joins the command master chief petty officers from USS Callaghan and USS Chandler in cutting the "safe riding" cake celebrating the completion of the safety course for both ships at NAS North Island. Chandler's CO, Cmdr. R. J. Natter looks on (far left).

There are times when drastic situations require drastic and immediate measures. The commanding ing officers of two San Diego-based guided missle destroyers saw statistics released by the Office of the Chief of Naval Operations last year that showed a serious increase in deaths and injuries to Navy personnel operating motorcycles as a drastic situation. Their solution, not necessarily drastic but certainly innovative and effective, was to take the matter of motorcycle safety training into their own hands, so to speak.

Commander Rodney P. Rempt, commanding officer of USS Callaghan, and Cmdr. Robert J. Natter, who commands USS Chandler, discovered that members of their two crews were having some problems getting certified to operate their motorcycles aboard the North Island NAS where the two ships share berthing. The course in motorcycle safety that the NAS Safety Office offered was complete and comprehensive and their instructors fully qualified. However, as is the case with many ships' companies, scheduling of these classes often clashed with in-port ships' work or operational schedules. In some cases, men were signing up for classes only to have them cancelled when minimum participation was not achieved. A dilemma indeed.

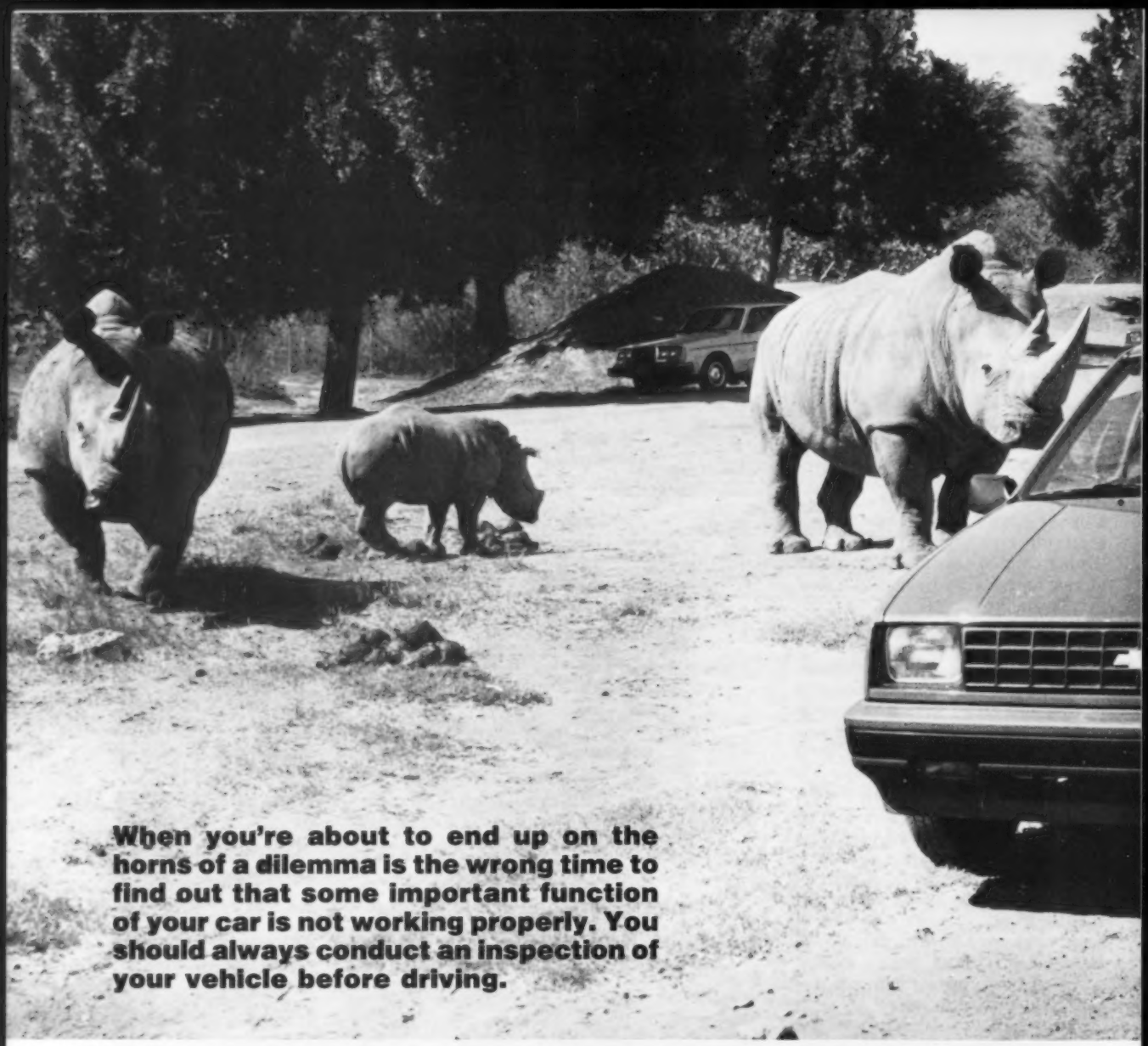
The two commanders discussed the problem and then decided to take action. The solution was to have, in a manner of speaking, the mountain come to Mohammed. Sharing many operational commitments as well as their North Island pier, the two ships coordinated a planned Safety Stand Down so that the maximum number of personnel could be freed up for one five-day time span.

The ships' command master chief petty officers then took over and contacted the base Safety Office to propose an amended course that would fit into that time-frame and would be dedicated to the crews of Callaghan and Chandler. Safety Office Instructors Jack "Luke" Lucarelli, a retired California Highway Patrol officer, and Equipment Operator Chief Walt Curtis, assigned to Amphibious Construction Battalion One at Coronado Naval Amphibious Base, volunteered to lend their talents and the Safety Office pitched in with the necessary equipment. Both ships asked for crewmembers who wanted to participate and become safety certified on their motorcycles and 28 responded.

On Dec. 3, 1984, the first of two 2½-day courses commenced and in the afternoon of Dec. 7 a cake was cut to denote the completion of the second course.

In addition to the lessons learned by the 28 men from both ships in safe motorcycle operation, there was a valuable lesson learned in the effectiveness of ingenuity and cooperation. Twenty-eight officers and men received their motorcycle operators' certification and both ships were able to carry out ship's work and meet operational requirements, and it was accomplished in only five working days.

Commander Rempt and Commander Natter viewed the success of this pilot program as a strong indication that other Pacific Fleet ships might find such a cooperative effort invaluable in ensuring their crews' knowledge of safe motorcycle operation and maintaining command responsibilities. With such emphasis on motorcycle safety, and the support demonstrated by the commands, those "drastic" statistics will hopefully become mere memories.



When you're about to end up on the horns of a dilemma is the wrong time to find out that some important function of your car is not working properly. You should always conduct an inspection of your vehicle before driving.

AVOIDING the HORNS of a DILEMMA

(above)
First, check the general condition of the complete vehicle. Inspect doors, windows, windshield, seats, cargo area and body for tampering or damage that may have occurred since the car was last driven.

(below)
Check under the car. Many defects, especially leaks, are more apparent after the vehicle has been parked overnight. And while you're bent down, check the tires for proper pressure and tread condition.

Inspect all lights and reflectors making sure they are in good condition and working properly.

Outside mirrors have to be adjusted before driving.

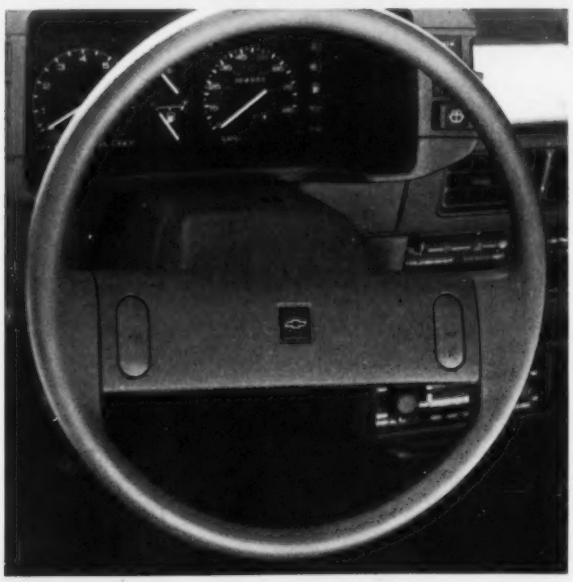
(left)
The windshield and windshield wipers should be checked and cleaned.

Once inside the vehicle adjust the seat, inside mirror and controls to your comfort and for safe operation.

Always check under the hood. The backyard mechanic will be going over what and how to do this inspection soon.

(left)
Then, with your safety belt properly adjusted you're ready to drive away.

Spectrum courtesy of Chevrolet and Animals courtesy of Lion Country Safari



While driving be alert for unusual vibrations, noises, odors, abnormal instrument readings, erratic brake and steering operations and other indications of vehicle malfunctions.

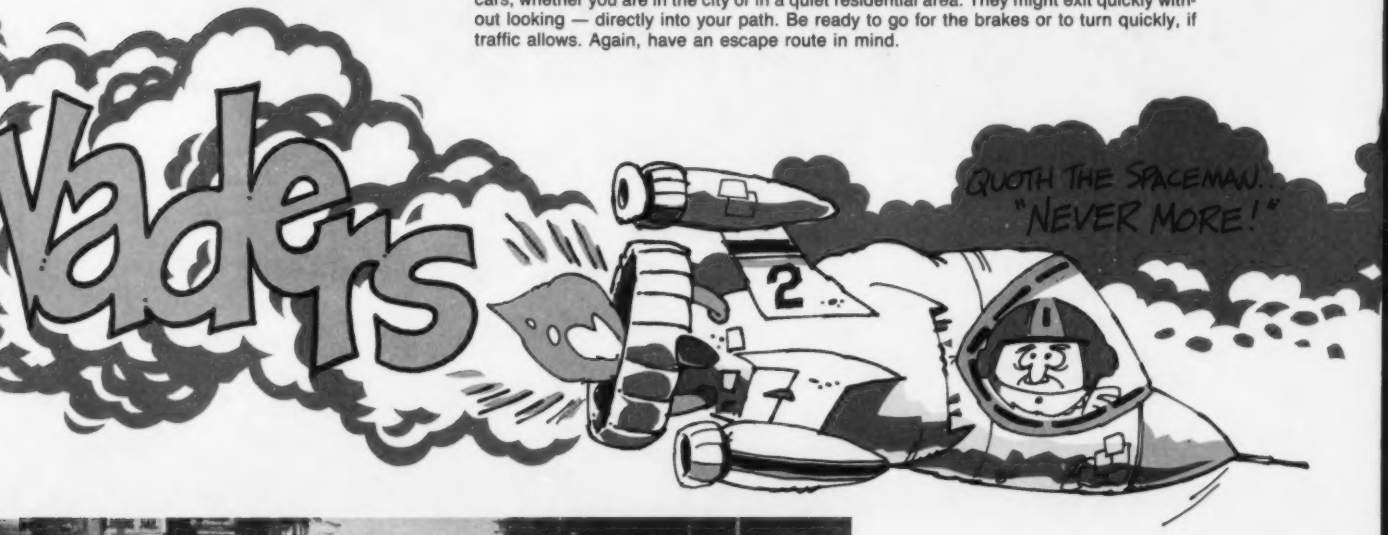
This item is dedicated to those thoughtless people who speed past you to take the parking space you were aiming for, or stop in the middle of the street to have a conversation with a friend, or otherwise invade your personal territory. Close encounters with this kind of "space invader" are not any fun. Since they will not listen to anybody, we'll give you some advice to help you stay out of their way.

Space Inv

The space invader here might be playing an automotive version of "chicken," or perhaps he's just careless. Whatever his excuse for changing lanes so near the other car, if you see anybody moving in ahead of you be ready to slow down, whether or not he's close. You don't have to play games along with him.

How you gonna keep him down on the farm? When an invader drives his car like a tractor, swinging left to go right, oncoming drivers might swerve or panic-stop, expecting him to turn left in front of them. Behind him, a motorist might try to pass on the right, only to meet the tractor-turner on his way around. Always watch other cars carefully, no matter how they are signaling, and provide yourself with a way out of possible tight spots like this one.

It's not only moving traffic that can cause trouble for you. Watch for invaders in parked cars, whether you are in the city or in a quiet residential area. They might exit quickly without looking — directly into your path. Be ready to go for the brakes or to turn quickly, if traffic allows. Again, have an escape route in mind.



"Full speed ahead, helmsman! We're going to *ram*!" We sympathize with any anger you might feel in this situation, but you know you can't do that. If possible, move into another lane and go around. Slow down and stop if necessary. There's no way you can teach this kind of invader a lesson without ruining your day.

Air Force traffic safety officials are hawking "good news; bad news" about last year's motorcycle safety program. The good news is that although motorcycle registrations in the Air Force have increased by 123 percent since 1981 (to more than 90,000), there has been an 11 percent overall reduction in fatal mishaps during the same period. When compared with 1983, the Air Force had a 28 percent reduction in motorcycle fatalities in 1984.

However, for 42 Air Force personnel these figures no longer mean anything. They have become the bad news. They were the ones killed.

Of the 42 Air Force personnel killed, 39 were operating motorcycles and three were passengers in the 41 mishaps that took their lives.

As in past years, motorcycle operator errors caused nearly all the accidents. In 1984, more than 90 percent of the accidents (37 of 41) were caused by the motorcycle operator.

Excessive speed, improper braking or no braking, failure to negotiate a curve, or a combination of these factors were the major operator errors.

Of course, riding a motorcycle at excessive speeds resulted in nearly half the accidents (20 of 41). What naturally follows speeding is braking. Therefore it should be no surprise that 19 of the 41 mishaps involved improper or no braking.

Fourteen of the 39 Air Force operators failed to negotiate a curve while the combination of excessive speed and failure to negotiate a curve resulted in 13 of the 41 accidents.

Certainly the larger a motorcycle's engine the faster it will go. Of the 41 mishaps bikes, 27 were larger than 500 cc.

Training and experience are always

factors in any accident. In the cases of the 39 Air Force operators killed in 1984, only four had attended a Motorcycle Safety Foundation (MSF) certified hands-on motorcycle skills training program. That translates into 90 percent of the fatally injured operators *NOT* having had hands-on training. Similarly 11 of the 39 had *NOT* attended the Air Force Regulation 50-24 Course VII "Motorcycle Challenges."

Ten of the 39 Air Force motorcycle operators had six months or less experience on a motorcycle, while four of the total 41 accidents involved riding a borrowed bike.

Experience also involves learning from past mistakes. In the case of the 39 Air Force operators, four had one or more previous traffic violations.

Equating age and experience, nearly three out of every four fatalities (31 of 42) were under 25 years old.

In nearly four of every 10 accidents involving Air Force operators (15 of 39), the operator was under the influence of alcohol with a Blood Alcohol Content (BAC) of .10 or higher. Four of the 15 had BAC's over .20.

Finally, seven of the 42 fatally injured Air Force personnel were not wearing helmets.

Likewise, the U.S. Navy recently analyzed data involving some of the 609 Navy personnel killed in motorcycle mishaps between Jan. 1, 1977, and Dec. 31, 1984.

In the sample 46 fatalities studied by Dr. M.S. Borowsky at the Naval Safety Center, 42 were operators and four passengers.

As in the Air Force studies, nearly all the accidents were the fault of the motorcycle operator. In the Navy study 36 of the 46 mishaps (78 percent) were the motorcycle operator's fault.

Also close to the Air Force figures, 85 percent of the victims (39 of 46) were 25 years old or younger.

"Alcohol appears to be a severe problem," stated Dr. Borowsky. "Though caution should be applied in interpreting the data because of lack of controls (statistical and medical), the statistics show that approximately two-thirds of the motorcycle fatalities had alcohol involvement in the crashes. Speeding/loss of control was a factor in virtually all of the cases involving alcohol on the part of the cyclists. . . . Twenty-six cases (68 percent of the cases with 'known' BAC; 57 percent of all fatalities) involved motorcycle drivers with at least .10 BAC — enough for conviction under 'per se laws' in approximately one-third of the states and enough for use as evidence for driving while intoxicated under 'presumptive laws' in virtually all states."

The actual figures show 26 of the 38 known victims to have BAC's above .10 and seven with BAC's of more than .20.

The Navy's figures about helmet wear were incomplete because it was an unknown factor in 12 cases. However, in the remaining 34 fatal accidents, 11 of the dead (32 percent) were not wearing helmets.

In analyzing the motorcycle fatalities, the Navy looked carefully at when the mishaps happened. Dr. Borowsky found that 78 percent of the fatalities (excluding the one unknown case) occurred between Thursday and Sunday "when probably most of the driving takes place."

Further, the study showed that 60 percent of the fatalities took place between 8 p.m. and 3 a.m. "Of these evening crashes," Dr. Borowsky stated, "78 percent had alcohol involvement on the part of the motorcycle driver."

Dr. Borowsky went on to explain that 22 percent of the total fatalities occurred between eight in the evening and three in the morning between Friday and Sunday with a 70 percent alcohol involvement. "This implies that only 37 percent of the 'late night' fatalities were during the 'weekend,' " he stated.

In addition, four cyclists were fatally injured between eight Sunday evening and six Monday morning. But there was no evidence that they were returning to base from out of town. However, there were two mid-week fatalities during early morning hours where the cyclists were travelling long distances back to base.

The highest number of fatalities happened during June and July — "most likely because proportionally more driving occurs then," concluded Dr. Borowsky. Similarly, 89 percent (41 of 46) of the fatalities occurred during the "warm" months from May to September and/or in "warm" climates such as San Diego. "In other words," Dr. Borowsky said, "only five cases took place between October and March in locations which tend to become cold during these months — again most likely because of lack of exposure in those conditions."

Again, probably because most driving is performed under these conditions, 88 percent of the cyclists killed were injured on dry roadways when there was no fog or precipitation. Two of the accidents happened in the rain, three in the fog and three situations were unknown.

Additional Navy data showed that 44 of the victims were men (41 operators and three passengers) and two women (one operator and one passenger). In the known cases, 26 were single and seven married. And in the 45 known cases, only one was absent without leave.

The speed involved in the fatal accidents was not known in 15 cases. In those cases where it was known it was estimated to be more than 60 miles per hour in nine mishaps, between 51 and 60 in seven, between 36 and 50 in 10, between 16 and 35 in three, and less than 15 mph in two accidents.

Careful study of this information should help all motorcyclists decide what areas in their skills' background need to be improved to help keep them from becoming just another number in 1985's "bad news."

. . . and the question is:
'WHAT'S THE BAD NEWS?'

An odd-angled intersection and numerous parking areas result in a potentially high hazard area during change of shifts.

driving at LAUGHLIN

(left)
With narrow streets and a mixture of head-in and parallel parking, one must be alert when driving in downtown Del Rio.

(below)
Traffic on the north end of U.S. Highway 90 is extremely heavy. Entering from side roads is difficult at best.

by CATHY CAMPBELL
Laughlin Air Force Base, Texas

Laughlin Air Force Base is somewhat isolated, located eight miles from the Mexican border town of Del Rio, Texas, 80 miles from a city of equal size and 160 miles from the nearest major city, San Antonio. But its proximity to the city of Ciudad Acuna, Mexico, with an estimated population of 70,000, and to Del Rio, with 34,000, poses some unusual driving conditions in the otherwise sparsely populated area. The biggest hazards on the highways are deer, armadillos, and other critters.

Equally dangerous are the sudden rains, common to southwest Texas. These are few and far between, but they are fierce, often resulting in flash flooding in unexpected places. Many people have died as a result of being swept away by the rushing currents. There are several areas in the local community where waters can reach car-bumper-height in a matter of minutes, causing vehicles to stall in the streets.

Traveling to Laughlin via U.S. Highway 90 from the east is a pleasant trip on a two-lane highway surrounded by wide open spaces. One of the few distractions is a frequent train which runs parallel to the highway. The trip is so relaxing that people are often lulled into a false sense of security and are startled by the animals that run into the highway. People are also unprepared for the increased traffic flow they are confronted with when they reach the point where the highway widens to a four-lane just before reaching the base, particularly during the peak traffic hours from 3:30 pm to 5 pm.

To enter the base means crossing the unguarded railroad track which runs right in front of the main gate. This poses quite a problem during peak traffic hours when backed up traffic moves slowly. The intersection is a tricky one, crossing a two-lane highway leading east with vehicles traveling at high speeds. Extreme caution is required when crossing this line of traffic.

The main street in to Laughlin is Liberty Drive. Like most of the base streets it is a two-lane road. During peak hours traffic leaving the base is almost at a standstill, making it nearly impossible for cars to enter from intersecting streets. The problem increases as one gets nearer the front gate. Impatient drivers some-

This is the seventh in a series of articles about driving conditions at Air Training Command bases.

The International Bridge crossing the Rio Grande into Mexico is so narrow that a car and a truck can't pass at the same time.

To enter Laughlin, traffic must first cross an unguarded railroad crossing.

Vehicles at 4th and Laughlin must creep into the intersection to see around parked cars.

times edge into the mainstream of traffic. Traffic congestion is also a common problem on 2nd Street which runs parallel to the flight line. This is largely due to mission vehicles and the large parking lots which line the entire length of the road.

For the most part, traffic flow on Laughlin is moderate to light. There are, however, a few blind intersections which require a little extra caution, such as the corner of Laughlin Drive and 4th Street.

When approaching that intersection from the northeast, the view down Laughlin Drive is partially blocked by the Contracting Building and its parking area. Traffic is forced to creep into the intersection to make sure the way is safe to proceed.

Circle Drive, while not dangerous to people familiar with the base, is quite confusing to newcomers. The one-way circle is intersected by five streets, joining the housing area with the rest of the base and the west gate.

School buses, which use the west gate, stop around the circle. This means a lot of children walking home who are often quite young and a little careless when it comes to watching for cars, so it is up to the drivers to watch for them. Going the wrong way around the circle and speeding are problems often connected with accidents in the circle.

The road leaving Laughlin through the west gate leads to an intersection that has been the scene of some serious accidents over the years — Laughlin Access Road and U.S. Highway 277. Traffic on 277 crests a small hill shortly before reaching the blinking caution light marking the intersection. Accidents occur when people pull out in front of or run across the path of the oncoming traffic. At highway speeds, it's difficult for drivers to stop in time to avoid hitting the offending vehicle.

Driving in the local area presents conditions which are unique to a border town. Settled in the early 1860's along the winding San Felipe Creek, Del Rio has many roads that follow the creek's path. This creates some unusual sharp turns and intersections. The road in the older parts of town as well as in the downtown shopping area are extremely narrow, just as they are in Mexico. For this reason, the main street in downtown Del Rio is one-way for a few blocks, then becomes a two-way street.

continued

continued

As Del Rio has grown to the north, the main thoroughfare, Highway 90, has become lined with businesses, shopping centers and a mall. It is a modern, four-lane highway with a center turn lane. Accidents are frequent along this stretch of highway due to the high volume of traffic, particularly in the mall area. Many of these have been fatal.

With Mexico only three miles away, it's no surprise that one in 10 vehicles on the Del Rio streets bears Mexican license plates. Just as when Americans drive in Mexico, Mexican citizens who drive here sometimes have problems understanding the traffic laws and the language. It's always a good idea to be especially alert when following a vehicle with Mexican plates.

Most people can't visit the Del Rio area without paying at least one visit to its sister city of Ciudad Acuna. If you decide to drive across the border, purchase Mexican insurance. It's inexpensive and can be bought by-the-day at the border.

Narrow streets, heavy pedestrian traffic and the fact that traffic signs are in Spanish, means that drivers must be extremely cautious and drive defensively when in Mexico.

(above)
Laughlin's Circle Drive is the only one-way street on base and can catch newcomers by surprise.

(left)
Traffic leaving Mexico forms long lines going through customs. Impatient drivers sometimes try to pass or cut in, causing accidents.

To enter Mexico, one must cross the International Bridge which spans the Rio Grande. The bridge, which was built in 1929, is so narrow that passing cars are only inches from each other. Approximately 3,500 vehicles cross the bridge each day, with the number increasing to 4,000 on weekends and holidays.

The streets in Mexico are extremely narrow, with parking on both sides. Traffic is very congested and traffic flows in a confusion on one-way streets. The first thing that strikes the average American is that all the signs are in Spanish. Naturally! They do, however, use international road signs which helps some, but signs aren't always in logical places. For instance, a one-way sign may be posted on a building. It's not at all unusual for traffic to be held up by a donkey cart or a street vendor. Pedestrian traffic is also quite heavy. Driving in Mexico is a whole new experience. Some people may prefer to park on the U.S. side and take a taxi to Mexico to avoid any problems with the traffic laws.

Whether driving in Mexico, Del Rio or on base, the main thing to remember is to be alert at all times and look for the unusual to happen. Touring the area can be a lot of fun, if it's done safely.

TRUE ACCIDENTS

Following are a few reports of accidents involving Air Force members. We have removed names and references to dates and places.

HORSE

A sergeant was riding his motorcycle to work at 0615 on a winter morning. He was moving at the speed limit of 40 mph, wearing his helmet, and his motorcycle light was on. The road was paved, but not marked or lighted. A horse entered the intersection the same time he did and the motorcycle hit it. The sergeant's helmet came off in the impact. He was declared dead on arrival at the hospital. Investigators discovered the horse had broken loose the night before and had apparently wandered the area all night. The horse was black, and because of the lack of skid marks the investigators decided the sergeant probably never saw the animal.

MISJUDGMENT

A sergeant was riding his motorcycle east on a road a few miles from his base. As he went through an intersection at 50 mph he hit the left rear wheel of a truck. He was thrown off the motorcycle and received massive body injuries. He was pronounced dead at the hospital. Investigators decided he had misjudged the clearance of the truck that was already in the intersection.

EJECTED

An airman left work at the end of her duty to run an errand off base. She stopped at a stop sign, and when she continued through the intersection her car was hit broadside on the passenger side by another car that was going about 35 mph on the cross-street. The other street did not have a stop sign. The airman was not wearing her seat belts and was ejected from the car. She died two hours later in the hospital from massive chest injuries. The investigators determined she had failed to yield the right of way.

REAR-ENDER

Two airmen were riding a motorcycle on base. They stopped behind a car that had stopped at a troop crosswalk to allow trainees to march by. A second car came up behind at high speed and failed to stop. It hit the motorcycle, forcing it into the trunk of the first car, and throwing both riders over the top of the first car. The airmen landed 29 feet in front of the car. One died at the scene and the other died three days later in the hospital.

FISHTAILING

A sergeant was driving his domestic car (rear-wheel drive) on a wet winter road near his overseas base. The car began to fishtail, and witnesses said the sergeant gave it more speed to correct the movement. The car skidded into oncoming traffic and was struck on the side by another car. The sergeant was killed.

ICY ROAD

An airman was driving south on a rural highway. He lost control due to the icy road conditions and hit a northbound car broadside. The airman was pronounced dead at the scene, and the other driver was treated at the hospital and released. The investigators discovered that the road was straight at the mishap site, and that the drivers had not been speeding or drinking. The road was so icy that the police officer had difficulty standing.

OUT OF CONTROL

A staff sergeant and airman (husband and wife) were traveling on a highway covered with slush that was beginning to freeze. It was 1740. They passed two cars that were off the right side of the road in a ditch. They stopped and backed up to help. At this time, another car was approaching behind them. It had just started up a slight rise in the road and the driver sped up to maintain momentum. He was traveling about 35 miles per hour, but the wet surface caused him to skid and lose control of the car. As the airman got out the passenger side of the car, she saw the second car skidding directly toward her car. She began to run into the ditch to get away. The sergeant, still in the car with his seat belt buckled, saw the approaching car in his rearview mirror and lay down across the front seat. The second car hit the Air Force members' car in the left rear, propelling it into a snowbank on the highway median. The sergeant was uninjured. The second car veered to the right into the ditch. It hit the airman and she died at the scene. Investigators blamed the accident on the road conditions and the second driver's inexperience with winter driving.

ROLLOVER

A sergeant and two airmen were having drinks at a roadside tavern. After each had had two doubles and three beers they got in the sergeant's car and drove south back toward their base. A witness said the sergeant was tailgating the vehicle in front of him. The sergeant veered to the left to pass the vehicle, and then veered back into his own lane to avoid oncoming cars. He overcorrected and the car began to skid counterclockwise. It skidded 160 feet, then across the opposing lane and then skidded another 89 feet on the shoulder through dirt, sand and rocks. Finally it hit an embankment. The driver's door opened and the sergeant was partially ejected. The car rolled over on his side and he was crushed between the door and the body of the car. The passengers received minor injuries. The sergeant's Blood Alcohol Content was .27.

INCOMPLETE PASS

A sergeant and his wife were going into the city from their base. An airman, traveling behind them, tried to pass them where the highway was marked with a double yellow line. The airman pulled back to the right when he saw an oncoming car. As he did so, his car hit the left rear corner of the sergeant's car, causing it to spin and then roll four times. The sergeant and his wife were taken to the base hospital, and the sergeant was taken from there to the local civilian hospital, where he died in the emergency room. The airman was not injured.

PARKED TRAIN

An airman was driving his car north on a road when he crashed into a parked train. He was pronounced dead at the scene. Police noted the strong smell of alcohol in the car, and a blood test revealed he had a Blood Alcohol Content of .27.

Safety FIRST

Don't wear rings, watches, bracelets or any jewelry when working on your vehicle. Also avoid wearing neckties or loose clothing, and tie up your hair if it is long.

There's a right and wrong way to do everything including your own car maintenance and repairs. But more importantly, there is a safe way to get the job done.

Here are a few tips that should make every job you tackle as a backyard mechanic safe.

Wearing coveralls will protect your clothing and body from dirt and grease.

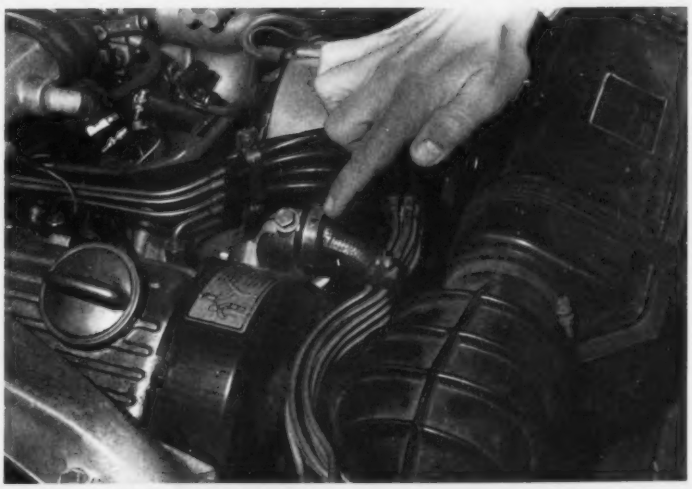
Any time you're working on a vehicle, read the instructions that came from the manufacturers for everything you're using, as well as the service or shop manual covering the job at hand.

Chock the wheels. Set the parking brake. Put the transmission in neutral or, on automatic transmissions, park.

When working under a vehicle, always support it with proper jack stands.

Always operate the vehicle in a well-ventilated area to avoid carbon monoxide asphyxiation. If the area can't be ventilated, route the exhaust outside via a leak-proof exhaust hose.

Keep hands, hair, loose clothes and test leads well away from blades, belts and other moving engine parts.



Don't touch hot exhaust manifolds, radiators, or high-voltage spark plug and coil terminals.

Tis better to be safe than sorry . . . cheaper too!

Never look into a carburetor throat while the engine is being cranked or running. Sudden backfires cause burns.

Never smoke or use an open flame near a charging battery. Also don't smoke or allow flame or spark to occur near carburetor, fuel line, fuel filter, fuel pump, spilled gasoline, cleaning solvents and other flammables.

Be especially cautious of using anything electrical within 18 inches of the floor, to avoid igniting gasoline vapors.

Keep a fire extinguisher rated for gasoline and electrical fires handy.

Every job has its proper cleaning solvent and that solvent is **never** gasoline.

Use the proper tool of the proper size for every job. Never use worn tools. (See February and March 1984 *DRIVER*.)

Keep your work area clean and uncluttered.

Think "what is going to happen" should your hand slip when working with a tight bolt or nut.

Wear safety goggles when drilling, grinding, using a chisel or in any situation where there is the remotest possibility of getting anything in your eyes.

Timely Topics

TAMPERING AND SWITCHING CONTINUES

According to an Environmental Protection Agency (EPA) survey, it appears that fuel switching and emissions control tampering is continuing at what the agency considers an alarming rate. The EPA survey revealed that 26 percent of the 1975 through 1983 model cars tested had at least one emission control device that had been tampered with and 14 percent of the vehicles had been contaminated with leaded fuel. The EPA said it considers these percentages minimum estimates and that rates in various geographic areas vary considerably. Both tampering and fuel switching rates were lower in areas with inspection and maintenance programs.

FIRST USED CAR LEMON LAW

Buyers in New York state are now protected by the nation's first law covering used car sales, according to officials of the Consumer Protection Board. The law requires dealers to provide a 60-day or 3,000-mile warranty on cars driven up to 36,000 miles and a 30-day or 1,000-mile warranty on cars driven more than 36,000 miles. Cars sold for less than $1,500 are exempt. State officials said during 1983 1.6 million used cars were sold in New York at an average price of $5,248. Sixty-two percent of these cars had been driven more than 36,000 miles.

NHTSA SIGNS AGREEMENT FOR NEW MOTORCYCLE SAFETY PROGRAMS

The National Highway Traffic Safety Administration (NHTSA) and the Motorcycle Safety Foundation (MSF) have signed a cooperative agreement aimed at reducing deaths and injuries resulting from motorcycle crashes by promoting the use of improved motorcycle operator licensing tests, rider education courses and public information materials.

NHTSA Administrator Diane K. Steed hailed the agreement "as an important step in improving motorcycle safety.

"Over 4,000 motorcyclists are killed each year in accidents," Steed said. "This represents 10 percent of all traffic fatalities in the country. It is a particularly tragic figure since most of the victims are young people."

Under the cooperative agreement, NHTSA and the MSF will provide technical assistance and training to state driver licensing examiners in the use of special motorcyclist skill and knowledge tests. They also will provide the states with a model motorcycle operators' manual and will advise the public of the advantages of rider education programs. In addition, educational materials will be developed to help motorcyclists increase the use of techniques to improve their visibility to other motorists. More than half of the crashes between cars and motorcycles happen because the car driver did not see the motorcyclist in time to prevent the collision.

Other educational programs will aim at increasing safety helmet use and reducing the involvement of alcohol in motorcycle accidents.

The Motorcycle Safety Foundation was established in 1973. It is a non-profit organization supported by five motorcycle manufacturers: Honda, Kawasaki, BMW, Suzuki, and Yamaha.

EPA TO BAN ASBESTOS IN BRAKES

EPA plans to ban the use of asbestos in car and truck brakes.

In response to a petition filed by the Natural Resources Defense Council, EPA said it has found a risk to human health, but it has not gone so far as to find an "unreasonable" risk which would involve an immediate ban of all uses of asbestos in brakes now.

Last September, NRDC asked EPZ to ban further use of asbestos in brakes under the Toxic Substances Control Act, saying the risks to health are unreasonable and that economically and technically feasible substitutes are available.

EPA noted that asbestos is a demonstrated human carcinogen, causing lung cancer, mesothelioma and other lung disorders. The risk occurs during the entire life cycle.

EPA said the use of asbestos in brakes may mean that some 2,750 people are potentially exposed during the primary manufacturing of brake friction materials and that some 550,000 people are potentially exposed during servicing and repair of brakes. The latter danger occurs when dust is blown out of the drums being replaced and when linings are roughened and when shoes are relined.

NEW MAINTENANCE RECOMMENDATIONS

To increase consumer awareness of the need to maintain cars regularly, Ford Motor Company has removed maintenance recommendations from their 1985 owner's manuals and will publish the maintenance schedule in a separate folder. The booklet will draw attention to the difference between normal and severe driving to make sure consumers are changing their car's oil and filter frequently enough. In addition, General Motors is now informing motorists that unless they drive at least 15 miles or 30 minutes at a time, they should consider and oil and filter change every 3,000 miles or three months, whichever comes first. GM defines the following as severe driving conditions: driving less than four miles, extended engine idling, low speed operation, trailer towing, and dusty conditions. The Automotive Filter Manufacturers Council estimates 80 percent of American cars are driven under the definition of severe driving.

PROPER USE OF CHILD SAFETY SEAT SYSTEMS

Secretary of Transportation Elizabeth Hanford Dole recently warned that two-thirds of the child safety seats now in use are installed improperly or not used correctly, reducing their safety effectiveness.

At the same time, she offered congratulations to the 49 states and the District of Columbia that now have laws requiring the use of child safety seats and belt systems. Similar legislation has been introduced in Wyoming.

"Thanks to the remarkable progress that has been made in recent years, both in terms of state laws and increased public awareness, children traveling by car are safer than ever before . . . Although the laws have convinced more people of the need to buckle up infants and toddlers, we are concerned by reports of injuries in accidents in which a child safety seat was used, but may not have been used according to the manufacturer's directions," she said.

According to a recent study on misuse of child safety seats, conducted for the department's National Highway Traffic Safety Administration (NHTSA), failure to use a tether strap on those seats where it is required was the most common er-

ror. Tethers were not used in 85 percent of the cases, and about 80 percent of the time parents were aware of the need to use a tether, but considered it too much trouble to install.

Other findings include the following:

- Infant seats faced the wrong direction one-third of the time; 71 percent of the parents knew the seat was positioned incorrectly, but most thought the child was old enough to use the seat facing forward. (The infant is safer facing the rear of the car.)
- Harnesses and shields, common equipment on many safety seats, were found to be used incorrectly 18 percent of the time; they were simply not used 22 percent of the time. In 95 percent of these cases, parents were aware that the harness should be used, but said children resisted being harnessed.
- Car safety belts were improperly routed around the child seat 28 percent of the time; 75 percent of the parents were *not* aware that the belt was being used incorrectly.

There were a number of factors associated with child seat misuse. As expected, people who install child seats without following instructions are more likely to install them incorrectly. In addition, the study noted that people found to be using a child safety seat incorrectly were often not using safety belts themselves.

RELAXED BUMPER STANDARD UPHELD

The Reagan administration's 1982 decision relaxing automobile bumper standards was upheld recently in the U.S. appeals court. The court found the National Highway Traffic Safety Administration had acted within its authority when it reduced to 2.5 miles per hour from five mph the speed at which car bumpers must be able to withstand crashes without damage. Although auto companies supported the lower standard back in 1982, many have returned to stronger bumpers on their new models due to consumer preference.

CASE FOR 55 MPH

The National Research Council has recommended that Congress retain the 55 mph national speed limit on most roads, but says it is a political decision as to whether the limit should be raised on some rural sections of the interstate system. The speed limit — enacted in response to the Arab oil embargo in 1974 — continues to save some 2,000 to 4,000 lives each year, the 19-member research committee has reported. The lower speed limit also prevents some 2,500 to 4,500 serious injuries, and 34,000 to 61,000 minor and moderate injuries each year, the group said.

Alan Altshuler, dean of the Graduate School of Public Administration of New York University and head of the research committee, said the committee calculated that if the speed limit were raised to 65 mph on all rural interstates, an additional 500 lives would be lost each year. There would be a similar increase in serious injuries, and another 7,500 minor to moderate injuries.

Too time-consuming — that 55 mph — you say? The result of the 55 mph limit is a total of about one billion extra driving hours consumed each year — and average of seven hours per driver per year. On a trip-by-trip basis, that amounts to about two or three minutes per trip. So, relax and take the time to smell the flowers, gentlepersons. (National Safety Council)

DRINKING AGE

Twenty-six states are trying to raise their drinking age to 21 before Oct. 1, 1986, to avoid loss of $274 million in federal highway funds in 1987.

Potential losses: $33.2 million in Texas to $2.6 million in Vermont and New Hampshire.

The push stems from a federal law signed last July by President Reagan that says raise the age or lose the aid.

A USA TODAY survey of the states in January found:

- Bills for age-21 drinking have been introduced this year in 18 states; similar measures are expected in eight more and the District of Columbia.
- Twenty-three states have age-21 drinking. June 1, Massachusetts goes from 20 to 21.
- Twenty governors say they'll sign age-21 drinking bills if passed by their legislatures.

ALABAMA — 19; proposed bill would raise to 21.

ALASKA — 21

ARIZONA — 21

ARKANSAS — 21

CALIFORNIA — 21

COLORADO — 21 for hard liquor, wine; 18 for 3.2 beer; proposed bill would raise to 21.

CONNECTICUT — 20; proposed bill would raise to 21.

DELAWARE — 21

D.C. — 21 for hard liquor; 18 for beer and wine.

FLORIDA — 19; proposed bill would raise to 21.

GEORGIA — 19; proposed bill would raise to 21.

HAWAII — 18

IDAHO — 19; proposed bill would raise to 21.

ILLINOIS — 21

INDIANA — 21

IOWA — 19

KANSAS — 21 for hard liquor and wine; 18 for 3.2 beer; proposed bill would raise to 21.

KENTUCKY — 21

LOUISIANA — 18

MAINE — 20

MARYLAND — 21

MASSACHUSETTS — 20; law raising to 21 is effective June 1.

MICHIGAN — 21

MINNESOTA — 19; proposed bill would raise to 21.

MISSISSIPPI — 21 for hard liquor and wine; 18 for 3.2 beer; proposed bill would raise to 21.

MISSOURI — 21

MONTANA — 19; proposed constitutional amendment would raise to 21.

NEBRASKA — 21

NEVADA — 21

NEW HAMPSHIRE — 20; proposed bill would raise to 21.

NEW JERSEY — 21

NEW MEXICO — 21

NEW YORK — 19; proposed bill would raise to 21.

NORTH CAROLINA — 21 for hard liquor; 19 for beer and wine.

NORTH DAKOTA — 21

OHIO — 21 for hard liquor; 19 for beer and wine.

OKLAHOMA — 21

OREGON — 21

PENNSYLVANIA — 21

RHODE ISLAND — 21

SOUTH CAROLINA — 21 for hard liquor; 20 for beer and wine; proposed bill would raise to 21.

SOUTH DAKOTA — 21 for hard liquor and wine; 19 for 3.2 beer.

TENNESSEE — 21

TEXAS — 19; proposed bill would raise to 21.

UTAH — 21

VERMONT — 18; proposed bill would raise to 21.

VIRGINIA — 21 for hard liquor and wine; 19 for beer; proposed bill would raise to 21.

WASHINGTON — 21

WEST VIRGINIA — 19; proposed bill would raise to 21.

WISCONSIN — 19

WYOMING — 19; proposed bill would raise to 21.

EXPLODING BATTERY

On a Sunday evening, I received a phone call from a neighbor who was stranded at the local store with a dead battery. I drove my car to the store and using her jumper cables, I connected the two batteries together. While she tried to start her car, I was leaning against her car, over the battery, looking at her engine. A loose internal connection to the positive terminal, we believe, caused a spark and ignited the battery which exploded in my face and upper body covering me with battery acid. I promptly went into the store's restroom and rinsed my face and eyes for about 20 minutes. I then had my wife drive me to the base emergency room. The emergency room treated my eyes for acid burn and released me. I have been told that if you clamp the ground to the chasis of the car instead of the negative side of the battery, you can reduce the chance of exploding batteries.

SrA Kevin A. Stocks, USAF
George AFB, CA 92392

You're right: You can reduce the chance of an explosion by making the last connection to a ground rather than to the negative terminal. However, in the case of a mechanical failure such as you experienced, even making the connections correctly is not enough to protect you. Your only real protection in this case would have been to not stand near the battery.

MY EXPERIENCE WITH SEAT BELTS

I would like to share an experience with everyone on the importance of wearing seat belts. Most of the articles I read about concern adults and not a child. Here is a personal experience which included my family:

On December 23, 1984, we decided to make a run downtown to exchange a present that was bought and was wrong so we wanted to get the right thing before Christmas. My father-in-law owns a 1984 Ford Bronco II which is what we were riding in. There were five of us in the vehicle including myself, my wife, my two year old son, and my father-in-law. We were driving down a fairly well-used road known for its slickness. The road was fairly dry but slick in the shaded spots. We went around a shaded corner only traveling at about 25 to 30 mph when the rear-end of the vehicle slipped and forced the front end against the edge of the road.

The force of hitting the edge, which was built up with frozen plowed snow, popped the right front tire off the rim which made the vehicle overturn (twice). My father-in-law was not one to wear his seat belts but that day we all had our seat belts fastened and my son was in his car seat belted in. The vehicle landed on its top so all of us were hanging upside down, suspended by our seat belts. Everyone of us came out of this without a scratch, just shook up a little. The only reason that we came out of this without a scratch is because of wearing our *SEAT BELTS*!

While we were waiting on the state police three more vehicles had accidents and two of those were within 75 feet of ours. One car went over the other side of the road which had to clear a guard rail; there were two people in that vehicle. The vehicle flew through the air about 40 feet before coming to rest between two trees. They walked away from it because of their SEAT BELTS! The second just slid off in the ditch; she had her seat belt fastened also. The third was above us about half a mile and hit the ditch on one side of the road and rolled across the pavement into the other ditch, the occupant also walked away — again, SEAT BELTS.

Since then I have told my relatives and anybody else that doesn't wear seat belts what happened. This experience convinced everyone to dig out their seat belts from under their seats and use them. Seat belts are not made for long trips only; things can happen right around the corner. And if you say this will never happen to me, think again because it can. *REMEMBER SEAT BELTS SAVE LIVES*!!

Well, that's my experience. I hope that you will let everyone read this.

A1C Rick A. Deason, USAF
Fairchild AFB, WA 99011

SAFETY BELT CHECK

I have read many articles in your magazine and other publications about the use of safety belts. I believe that the maintenance/inspection of the belts also should be mentioned. Belts should be checked at least yearly for proper operation by the user or a qualified mechanic. Belts should be checked for proper release. Shoulder harness can be checked very easily for engagement by carefully stepping on the brakes. This check should be completed by the driver or mechanic very carefully.

TSgt. Emilio J. Rola, ANG
Garden City, GA 31498

ACCEPTING RESPONSIBILITY

(Editor's note: We received the following letter and article, and MSgt Ron Shepard of AFISC's ground safety has provided a response.)

Dear Editor,

I am enclosing this copy of an article I've written on the wreckless habits of people on the road. All I ever hear about is alcoholism and driving. Well, I've had three accidents on my bike(s) caused by other people, two of which put me in the hospital. None of those people were drunk, they just weren't looking. The "Gee, officer, I didn't see him" syndrome has gone far enough! It's nothing but a cop-out!

Anytime I look into a parking lot, I see nothing but cars with my name on their bumpers. I'm really tired of being used as a hood ornament. Let's get to the root of the real problem and give people a license to drive, not a license to kill!

Sgt. Stuart Ulseth, USAF
Ft. Stewart, GA

* * *

There's a terrible disease in our community. In fact it's not only here but almost anywhere you look. And it's been around for a long time. It kills and cripples people every day. It affects young and old alike, and it knows no prejudice. Yet no one will acknowledge its existence.

What is the name of this disease? Its name is BAD DRIVING!

Too many people roaming our streets and highways have forgotten their basic driving skills. Neglect of common highway courtesy soon leads to dangerous habits, such as ignoring stop signs, changing lanes without turn signals, total lack of turn signals, pulling out into traffic in front of others, not using headlights during rain, fog, or near darkness, stopping suddenly in traffic without warning, tailgating. . . . The list could go on.

Perhaps some of these may seem minor to most people, but I have more reason to take notice. You see I ride a motorcycle. Not on weekends or when it's sunny outside, but every day. Therefore I have to be more aware of what's going on in traffic.

Now some of you might say that motorcycles are more dangerous and should not be ridden, but this is my freedom of choice. That's what makes America great!

Just because a motorcycle is inherently more dangerous than a car, does not give anyone the right to show less respect on the road for the bike rider! A common driving error that would cause slight damage to a car can hurt or kill a motorcyclist.

Awareness is the key factor to avoid traffic accidents. This can never be overstressed and by doing this, you may save a life.

Now while people in automobiles make mistakes, the motorcyclist isn't immune either.

Zipping through traffic on a bike can be very unhealthy and I see that a lot. Riders should place themselves on the road where they are more visible to other drivers.

During the summer, many cyclists will ride wearing sneakers and shorts with no other protection, except a helmet. In case of a fall, I think I would at least like to have the protection of jeans, shirt, and a good pair of riding boots. Leather or heavy jackets work well if it isn't too hot. Gloves are nice, also. A few things like these can save a rider's skin if he or she happens to fall.

This writer (rider) thinks there should be a thorough *hands-on* safety course required for automobiles and motorcycles before the issuance of the driver's license. But until such time, it's up to you and me to stop the death and injury of others on our roads. Use common sense and drive carefully. The life you save may be some one you love.

* * *

You have made some good points about accepting motorcycling's risks and learning how to ride and drive. Add practice and experience to your list and you have the makings of an excellent motorcycle safety program.

However, there is one *major* flaw in your approach: You don't seem to be accepting any responsibility. Although you don't come right out and say it, the tone of your words implies that most motorcycle vs. automobile accidents are the fault of the automobile driver. Not necessarily so.

But don't take our word for this. Sit down with a stack of motorcycle accident reports and open-mindedly start looking for rider-errors. You don't have to look for the four-wheelers' mistakes because they are usually spelled out clearly. It shouldn't take you long to discover a way the motorcyclist could have avoided the accident in almost every case.

For example, many motorcycle vs. car accidents happen at intersections when the car turns in front of or into the motorcycle and then, as you said, the driver declares s/he never saw the motorcycle. OK, the car driver is legally responsible, but the motorcyclist is to blame.

Why? Because the safety-minded, skillful motorcyclist is also an informed rider who knows how many accidents happen in just this way. Nobody with that kind of information is going to ride blindly into an intersection and T-bone a car or become a hood ornament.

It is easy to confuse legal responsibility with ultimate blame. When this happens the attitude develops that no matter what happens to you, it's probably somebody's else's fault.

Of course the same reasoning holds true for single vehicle accidents. The reason the motorcycle and rider end up on the ground is because of something the operator did. If the rider doesn't know what the mistake was, s/he's going to do it again. And, if the rider doesn't accept the responsibility for having made the mistake, s/he's probably going to continue to do it until s/he either gets it right or terminates her/his riding career permanently.

Everything that happens to you on your bike is the result of something you did or didn't do.

The American Motorcyclist Association and the Motorcycle Safety Foundation joins you in trying to make four-wheel drivers more aware of motorcycles. But that's not enough. You as a motorcyclist can't depend on the car driver to keep you from becoming a hood ornament. That's your job.

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Space Invaders!

"Hey! Does this line mean anything to you?" If you're upset by this kind of negligent or careless driver, turn to page 14.

"Hey! Does this line mean anything to you?" This is the kind of driving you expect from those people with the bumper stickers that say "Yes, as a matter of fact I do own the whole road." Your best defense is to squeeze over and then get away from this invader. Slow down and let him get ahead or, if you can, speed up.